ogy course is "simply a survival of an early stage in the pedagogy of the subject and has no place in a modern educational scheme."

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STATE ACADEMIES OF SCIENCE

CERTAIN groups of people interested in the development and application of the sciences in many of the states of the union have established academies of sciences. Some of the academies have developed into institutions exerting considerable influence at the present time, others have flourished for a period and then gradually have declined in their force until now it has become a question whether they should disband or should reorganize. Others have struggled to develop interest for a considerable period in their communities but finally have ceased to exist.

During the past year data have been collected and an attempt has been made to determine the general status and activities of all the state academies in order that each one may know its own relative standing in regard to resources and activities.

CLASSIFICATION OF MEMBERS OF STATE ACADEMIES

State Academies	Botany	Chemistry	Geology	Mathematics	Medicine	Physics	Zoology	Unclassified	Total
Colorado.....		20	75	11	5	15		20	146
Connecticut ..	4	4	12	2	12	4	7	128	172
Illinois.....	63	45	28	9	29	29	56	55	314
Indiana	51	24	16	10	22	23	55	30	231
Iowa	60	30	40	18	12	30	60	100	350
Kansas.....	20	30	10	10	12	12	10	79	173
Kentucky....	13	24	12	9	4	13	12	9	96
Michigan	55	0	30	0	21	0	45	33	208
Nebraska	13	8	5	4	9	5	10	19	73
New Mexico..	3	3	3	5	0	3	2	6	25
North Carolina	13	13	4	4	1	6	15	24	80
Ohio	66	6	40	4	16	29	79	18	258
Tennessee.....	5	14	6	4	0	8	1	37	75
Utah	11	6	4	1	5	10	14	41	92
Total.....	377	227	285	91	148	187	366	599	2,293
Per cent....	16.4	9.8	12.4	3.9	6.4	8.1	15.9	26.1	

Questionnaires were sent to all state academies of science and the returned information has been tabulated. The classification of members was arbitrarily limited to eight groups and only aims to indicate the general field of interest of the members. Several academies did not furnish a classified list of their members. Each secretary was asked to state whether the interest in the affairs of the academy by its members was "lively" or "apathetic." Such statements, in some instances, should be taken with reservations because of the personal element or the period of the year in which it was given. Much of the data is self explanatory and needs no comments.

Among the various conclusions that may be drawn from the data the one that is especially evident is that only a small percentage of the scientific people of the country are members of the various state academies. The reason for this lack of interest and activity is explained by one secretary as being due to the fact "that the day has gone by when men interested in widely different special lines of research or activity can profitably meet for the common discussion of their interests."

At the present time nearly all specialists belong to a national society composed of members all of which are interested in the same special science. Such people derive more benefit from this society than they would from a local academy. In order to meet this situation many of the academies have attempted sectional meetings in which those interested in any particular science might convene. This has been successful in a few large academies but in the smaller ones it has failed.

Whatever may be said in regard to the weaknesses of the academies two points should be remembered. First, the academies provide at their general meetings opportunities for considerable social intercourse between people from different parts of their respective states. This social factor has a tendency to promote good fellowship between the various institutions of the state and also to encourage research in the smaller colleges and normal schools. Second, many of the academies are able from funds provided from

GENERAL DATA OF STATE ACADEMIES

Academies of Sciences.	Members	Annual Dues	Annual State Appropriation	Salary of Officers	Annual Pages of Publications	Interest
California	300±	$ 6.00	No data given			
Colorado	142	10.00	None	$600	110±	"Apathetic during war, but now interest is reviving."
Connecticut	172	5.00	From private funds, $1,530	None	450	"Lively interest in publications, but a decided lack of interest in the meetings."
Florida	88	1.00	None	None	None	"Dead"
Illinois	314	1.00	$1,000	None	345±	"More lively than apathetic"
Indiana	231	1.00	$700	None	475	"Good and getting better"
Iowa	350	1.00	Printing	None	550–600	"Lively"
Kansas	173	1.00	$1,300	$1,000	400	"Rather apathetic"
Kentucky	96	1.00	None	None	None	"Fairly lively"
Michigan	208	1.00	Printing	$75	300–400	"Interest reviving"
Nebraska	73	1.00	$150	None	75	"Lively interest at the annual meeting, but apathetic the remainder of year"
New Mexico	25	.50	None	None	None	
New York	624	10.00	From private funds, $2,538	$900	300–500	"Active"
North Carolina	80	1.00	None	None	125–150	"Very lively"
Ohio	258	1.50	From private funds, $250	None		Fair
Oregon						"Long time dead"
Tennessee	75	2.00	None	None	50±	"60 per cent. alive"
Texas	No data given excepting					"Apathetic"
Utah	92	1.00	None	None	244 (1908–1917)	"Rather apathetic"
Washington, D. C.	518	5.00	From private funds, $750	None	800	"Active"
Wisconsin	350	1.00	$1.500	$200	500	"About 50/50"
Wyoming						"Dead"
Philadelphia Acad. Nat. Sci.	458	10.00	From private funds, $36,000	$19.000	650	"Up to standard"
St. Louis	210	6.00	From private funds, $650	$900	200–300	"Majority apathetic"

state or private sources to publish articles of considerable scientific value which due to their extreme specialization, local or very general nature, would not be accepted by the current journals. If the academies have outlived their general usefulness they can still remain very influential in existing solely as publication centers for special articles.

The American Association for the Advancement of Science has recently proposed a plan in which it has invited the academies to affiliate with it. This is not only a very gracious act but one that may stimulate the academies to further and more important activities.

David D. Whitney,
President of the Nebraska Academy of Sciences, May 1918, to May, 1919

October 15, 1919

RESULTS OF THE TOTAL SOLAR ECLIPSE OF MAY 29 AND THE RELATIVITY THEORY[1]

The results obtained at the total solar eclipse of May 29 last were reported at a joint meeting of the Royal and the Royal Astronomical Societies, held on November 6. The stations occupied were Sobral, in North Brazil, and Principe Island. Two cameras were employed at Sobral, the 13-in. objective of the Greenwich astrographic equatorial, and a 4-in. lens, of 19-ft. focus, lent, together with an 8-in. cœlostat, by the Royal Irish Academy. It was realized before the expedition started that the cœlostat was scarcely suitable for observations of such extreme precision as were required to detect and measure the

[1] From *Nature*.